



Fundamental Equities Outlook Act fast when the Fed fog clears

- Fed commitment to 2% inflation target will be tested
- Likely S&P500 trough in 2023 will be time to position for recovery
- EM picture buoyed by peaking dollar and China's Covid u-turn

A global slowdown in 2023 is locked in, and equity investors will be monitoring the Fed's reaction.

The period since equity markets and Treasurys retreated in March 2022 has been marked by a combination of gloom and confusion, with plenty of talk about a looming recession triggered by Fed rate hikes, but resilient economic data generating a strange air of disbelief.

This is being reflected in commentary from the real economy. On Friday December 9 Bank of America CEO Brian Moynihan told CNBC "American consumers are spending more this year than they did last year. In fact, in the first week of December, it picked up a little bit from November to a little higher percentage say 6% versus 5%. But it's still strong and it's consistent with a 2% plus growth economy."

The jury is still out on the likely duration and depth of an anticipated growth slowdown, and how it will impact monetary policy. From our perspective the lack of clarity is the result of the long, fading, tail of post-Covid recovery, and stimulus-buoyed savings accounts, rather than anything to become contrarian about.

The data is unequivocal that a slowdown is coming, with inflation still elevated, earnings revised lower and lower,

freight rates collapsing, and even the crude oil price has stalled below \$80 a barrel despite ongoing geopolitical tension.

Isn't this already priced-in to equities? We don't think so. The October and November 2022 rally was based on divining dovish signals from clear Fed guidance that policy rates will continue to be raised, and a downward correction in the dollar. That isn't a foundation for a sustained equity uptrend so we expect the market to test its 2022 lows in 2023.

Outlook For professional investors December 2022

Robeco Fundamental Equity Team



It's always darkest before the dawn

Another leg down in equity markets when the recession actually manifests itself, and the Fed's terminal policy rate is confirmed, will be difficult for the real economy. This is the time though when investors must act and rebuild growthoriented equity positions, particularly if, as many expect, the recession is mild in the US. In addition, the Fed's tough talk through this tightening cycle will face its ultimate test when recession arrives. If the Fed pivots with inflation well above its 2% target, which is possible, that will be a strong signal to get out of cash and back into financial assets whether they be bonds or equities. In that scenario a 2020like melt-up in equity markets cannot be ruled out.

Figure 1: US CPI still a long way from 2%



Source: S&P Dow Jones Indices, Robeco

Furthermore, even if the Fed holds its nerve, there are other obvious catalysts that could manifest in 2023. First, if the recession is mild – the fabled soft landing – and earnings projections stabilize, equity investors will conclude the bottom is already in and rebuild positions accordingly.

Second, any ceasefire, or more improbably a peace deal, in the Russia-Ukraine conflict would simultaneously reduce inflationary pressure, release pressure on central bankers and buoy risk appetite. This rosy scenario appears highly unlikely now, but so did war in late 2021.

Audrey Kaplan (Portfolio Manager Global Equities) Wim-Hein Pals (Portfolio Manager Emerging Markets Equities) Kees Verbaas (Head of Fundamental Equity)

December 2022

Third, China's recovery from Covid is likely to crank into gear after its recent relaxation of pandemic restrictions. Even for China skeptics the impact of a simultaneous recovery in domestic consumption, infrastructure investment and property market stabilization will have a dramatic effect on growth, especially in Asia Pacific.

EM fundamentals are stronger than in previous cycles

The China factor is one of the key reasons why we are more constructive on EM than DM. While EM equity returns have disappointed in the past decade relative to the US, fundamentals in Asia-Pacific, Latin America and even Africa are stronger now than in 2008/2009, and the next decade is unlikely to mirror the last.

As we enter what is expected to be a difficult, recessionary 2023 for the US and Europe, that improvement in fundamentals and partial decoupling in monetary policy is likely to see EM enjoy relative outperformance even as the global economy slows down.

The second catalyst we see for EM is a peaking dollar index which combined with the belated recovery in Chinese activity will see EM growth outstrip DM.

What does this mean for positioning? Not a great deal in reality. While we believe EM are better placed, these markets will still suffer from a global slowdown and China's pace of recovery will not echo the frenzied growth of the pre-Covid era. It does mean though that that flight to safety into the dollar has already played out, and that now is not the time to retreat from or underweight EM.

For our global equity portfolios this is influencing our relative allocations in DM and EM companies and we believe in terms of capital preservation and front-running a global economic recovery, a judicious allocation to high quality EM equities will pay off in 2023.



Table of Contents

Developed Markets (DM) -Emerging Markets (EM) - Audrey Kaplan Wim-Hein Pals 4 10



Developed Market Equities | With persistent inflation, and earnings declines: position portfolio to areas of resilience

- Sentiment factor remains neutral; stick with companies that generate strong free cash flow
- Economic outlook remains negative as rate hikes extend into 2023 aiming to tame inflation
- Expect more downgrades to global DM earnings despite some sectors of strength
- Overall, we have an increasingly cautious outlook for developed equities and recommend minimizing portfolio risk until the rate hike cycle is nearing completion
- Invest in high-quality companies with pricing power and strong operational track records

Five-factor summary

Factors	Score	Changes since last quarter
Macro	-	No change
Earnings	-	No change
Valuation	=	No change
Technicals	=	No change
Sentiment	=	No change
Overall	-	No change

Source: Robeco Global Equities team

Sentiment: Markets will remain more volatile than pre-pandemic as rate hikes continue at pace into 2023

As we wrote last quarter, global central bank hikes are continuing into a cold winter. Hikes are persisting as US and global inflation levels remain very high – on December 14th the Fed hiked rates for the 5th time YTD. The market's expectation regarding peak rates, as implied by the most recent October and November stock rally, could well be wrong given inflation's stickiness (also based on historical episodes of high inflation) and global central banks' unequivocal commitment to drive prices down.

There are clear challenges facing global central banks. The recent examples provided by Bank of Canada (BoC) and the Reserve Bank of Australia (RBA) highlight the economic tests heading into winter. On Oct 26th BoC increased their policy rate by 50 bps. Following that hike, about half the forecasters speculated the next hike would be "just 25 bps". However, only 10 days later, the Canadian economy released incredibly strong jobs and wages data -- very similar to the U.S. – indicating that labor markets are still very tight.

So, on December 7 2022, the BoC again raised its policy rate 50 bps surprising many who anticipated a smaller 25 bps hike. Market forecasters are now left wondering if the expected terminal rate level should also be revised higher after BoC's 7 rate hikes in 2022. And the question becomes, if one central bank revises the terminal forecast higher, will the Fed, the ECB, and multiple others be next? We already see a similar story building in Australia and other economies where the economy continues to operate in excess of demand for goods & services and with elevated inflation. This push and pull between (a) continued inflation pressures and (b) hope of policy rate peaking has meant the latest US survey of professional forecasters printed the highest recession probability in the past 50+ years as reported by J.P. Morgan. In recessions, historically markets typically fall about 30% if you review the record back to 1929 (according to Dow Jones Market Data). The MSCI World priced in USD (at the time of writing) has declined 16% which trailed the MSCI World priced in EUR (-11%) by 5 percentage points as the latter benefits from non-US investors investing in USD assets.

Figure 2 | IPO Transactions already indicate a recessionary environment like prior periods around recession (2001-03, 2008-09)



Source: Credit Suisse

Not only do markets typically fall in a recession, but IPOs, M&A transactions and other investor activity that we monitor already indicate global markets are exhibiting recessionary characteristics. The multiple sentiment data we monitor are mixed including some that are bullish such as: Institutional equity flows which have been strong leading into December and share buybacks which have also been strong in 2022, with buybacks in-line with 2021 levels. Buybacks have a positive EPS impact (due to share count reduction), and this implies long term confidence in equities. But there are equally some sentiment figures that are challenged, such as IPO transactions (Figure 2) which continue to have one of the slowest years in more than a decade in the US, indicating negative sentiment and risk aversion. For this reason, we expect the market to retest 2022 lows, but we are mindful that (potential) catalysts exist to propel markets higher.



The VIX Index is not providing a clear market signal at this time. The VIX – which is often referred to as the fear index and is a measure of the expected volatility of the S&P 500 – was in a "normal" range, around 15, during the two years prior to the pandemic, which included the US-China trade war. It rose during the pandemic to an average of about 25. The VIX peaked at around 40 in early March 2022 after Russia's invasion of Ukraine before moderating. However, since July the VIX has been oscillating between 18-35. It has not reverted to its "normal" pre-pandemic bullish range of 15-18 nor is it widely expected to peak again. If history is a guide, a falling VIX would be a good sign for stocks. A full three quarters of market participants, as measured by J.P. Morgan Investors Survey, expect the VIX level to stay between 20-29 in 2023 (Figure 3).

Figure 3 | J.P. Morgan Investors Survey Question: What is your expectation for average VIX levels in 2023?



Source: J.P. Morgan

The hope driven price action we saw in October and November when forecasters anticipated peak rates are inconsistent with several of our sentiment indicators and investors have to be aware of this dynamic. We recommend keeping your portfolio in a barbell approach that can swiftly shift gears if needed. Portfolio robustness is key and achieved by focusing on a diverse mix of high-quality value stocks, and companies with strong operational track records as these tend to outperform during economic slowdowns. We also began to dip back into selected discounted growth companies that have underperformed in 2022. We believe in fundamental factors that measure free cash flow generation and free cash flow yield. These indicators have strong track records over multiple decades to identify companies with long-term favorable stock performance. We will provide more details on our positioning later.

We hold the Sentiment indicator neutral in our

scorecard. We do not see a market capitulation signal yet, and neither are our sentiment indicators flashing "buy". We monitor VIX levels and would be more optimistic on sentiment if VIX reverts to its pre-pandemic range which would indicate a sustainable rally. We are also looking for improvement in IPOs and M&A transactions for signs of a turnaround in sentiment. Our research suggests that market rallies of 10% are common even during bear markets.

Macro: The threat of runaway inflation has not been tamed

Our macro outlook remains negative following our

downgrade last quarter. Despite the benign headlines suggesting several countries and regions are experiencing falling inflation, the picture is still worrisome. We expect Europe, the US and many other countries to continue their attempt to tame inflation. For example, the annual rate of inflation in the Eurozone fell in November for the first time since mid-2021. However, consumer prices in November were still 10% higher than a year earlier – down from the 10.6% annual rate of inflation recorded in October as energy prices fell – but still a heady 5x the Eurozone's target.

On December 13th the US CPI posted the smallest monthly increase in inflation in more than a year. The deceleration in inflation was well received, but the CPI at 7.1% is still much too high to declare a change in our economic outlook - especially as inflation is still more than 3x as high as prepandemic. It is welcome that lower energy prices helped offset rising food costs, but the risk remains that US and global demand could ease further. In Europe, we have seen financial conditions tightening since early 2022 and they will continue to tighten in the coming months. We expect a more front-loaded ECB hiking cycle than we did in the summertime. Looking ahead, it is worrisome as G10 central banks delivered 350 bps of rate hikes in November alone including the Fed, the ECB, the Bank of England, the Reserve Bank of Australia, Norway's Norges Bank, Sweden's Riksbank and the Reserve Bank of Norway. In the year to November 2022, we have recorded 2,400 bps of total rate hikes from the G10 central banks.

Figure 4 Duration of tightening impacts duration of slowdown



Source: Trahan Macro Research

As we note in Figure 4, economist models based on historical patterns suggest that the longer the rise in interest rates lasts, the longer the ensuing downturn. Aside from the market focus on central bank hikes and duration of hikes, we are considering other economic indicators to determine if the worst of the economic slowdown may be in the rear-view mirror. For example, we are monitoring new orders to inventories in the U.S. and in the Eurozone. If we get a sustained rally in new orders, it could be a signal to raise our economic outlook. So far, the data is inconclusive



at best as shown in Figure 5. Indeed, as we reported last quarter, the global manufacturing PMI, a coincident indicator of GDP growth, below 50 points, indicates we are in a stagnating period of economic activity. As of December 2022, global PMI is 48.8 —signaling we are indeed in a global slowdown and some economies, like the UK and Eurozone, are already in a recession with contraction this quarter, and likely next.

Figure 5 | Eurozone Manufacturing PMI – New orders to inventories



Source: J.P. Morgan

Along with PMI data indicating we are in a global recession; we are also concerned about CEOs collective view of the economy. A recent survey asked US CEOs to describe the economic conditions they are preparing to face over the next 12-18 months found that the overwhelming majority— 98%—said they were preparing for a US recession. Moreover, 99% of CEOs said they were preparing for an EU recession. CEO confidence is at the lowest level since the Global Financial Crisis (Figure 6).





Source: The Conference Board, The Business Council, NBER.

CEOs are facing strong inflationary pressures, rising input costs, rising interest rates, and rising employee wage demands, amongst other drags on business confidence. Most companies we speak to are preparing for a recession in 2023. Whether or not a recession arrives or a more shallow slowdown, these C-suite concerns are overall putting more negative risk on the economy as companies take actions that reduce growth, such as reducing capital expenditure plans, limiting new hires (or reducing staff), or shoring up their corporate balance sheets. FactSet counted that 179 companies in the S&P 500 (those with 3Q2022 earnings conference calls from September 15 through November 16) cited the term "recession" during their earnings calls for the third quarter, which is well above the 5-year average of 63 and the 10-year average of 54.

Global growth forecasts have come down for both 2H 2022 and 2023 while inflation risks and policy-rate projections have risen. In addition to the war, the energy crisis, and Covid disruptions, we suspect this will lead to a further reduction in corporate earnings.

Earnings: Expect more downgrades to global DM earnings revisions

As Citi Research reported in early December, the MSCI World trailing EPS (Figure 7) generally trends higher, with earnings growing at a compound 6% per annum over 50 years, but there have been significant setbacks along the way, usually coinciding with global recessions. On average earnings fall 31% over 2 years in a recession. The biggest drop was in 2007-10 when MSCI World EPS fell by 61%. The longest contraction began in 1989, with earnings taking 4 years to fall 35%.





As we noted when we lowered our earnings outlook factor midyear (Q2 Outlook), tightening monetary policy often triggers reductions in earnings forecasts. However, 2022 year-to-date earnings forecasts have remained resilient, especially in the US. The current consensus earnings growth for US is 6.1% and 4.7% respectively for 2022 and 2023. For 2023, earnings growth forecasts for Europe and Japan are hovering near flat at 1.2% and 1.1% respectively.







Source: IBES, MSCI, Robeco November 2022

EM appear to be leading the cuts (blue line) to EPS forecasts, and the DM regions overall still don't appear to be cutting forecasts much for 2023 (Figure 8). We do expect more earnings downgrades in the US and global DM, but it is not all doom and gloom as currently eight of the eleven sectors are still predicted to report year-over-year growth in earnings for 2023, led by Consumer Discretionary (35.9%, or 18.6% minus Amazon), Industrials (13.9%) and Financials (13.9%) (Figure 9). Given this inconsistency between a deteriorating macro outlook and relatively robust mid-single-digit consensus earnings, we do expect earnings to revise lower particularly in some of the cyclical sectors of the economy. For this reason, we maintain our earnings outlook factor at negative.

Figure 9 S&P Earnings Growth (CY2023)



Source
Contention
Provide
Contention
<th

Globally, by region, over the past 3-months Japan continues to lead the developed regions with earnings upgrades (Figure 9). During recent decades it has been rare to see Japanese earnings revisions positively exceed US ones. Research suggests that in times of USD strength and Japanese earnings momentum, it may be opportune to go shopping amongst high quality Japanese companies for bargains and price performance.

During the 4th quarter so far, U.S. corporate earnings received more downward revisions relative to Europe, and we expect this recent trend to continue as the U.S. has been raising rates much more aggressively in a bid to slow

growth and reduce inflation. Unlike Japan, developed Asia ex-Japan is showing the most downward revisions.



Source: IBES, MSCI, Robeco November 2022

Valuation: Beware the Fed (which wants to avoid a repeat of the 1970s); Search for opportunities in Japan and Europe

Despite the pleasant temperatures in Europe this Autumn, we expect a cold economic winter (both due to the energy shock and slowing global growth). We have seen an increase in uncertainty about the central banks future path as market participants have slowly accepted that many of the world's central banks will continue to hike to ease inflationary pressures. We reiterate, in particular, that the Fed will look back to the history of the 1970s. In that stagflationary era, the Fed famously declared victory far too early, when inflation dropped from 11.7% in February 1975 to 5.9% in November 1977, only to see it reaccelerate towards double-digits in the early 1980s. When this happened, it took even more drastic policy tightening, and two difficult recessions, to finally bring inflation under control.

Yet, despite renewed economic uncertainty, as of December, market valuations are still not close to depressed levels, so it's hard to get overly excited at this stage, especially with global growth slowing and central banks still in tightening mode. Too many pockets in the global markets have not seen real multiple compression while earnings risk remains to the downside as we enter 2023. As shown in Figure 11, the U.S. still appears expensive (high P/E relative its 20-year range) while both Europe and Japan appear more attractively valued.



Figure 11 | MSCI Regions Valuation ranges (20-years); 12-Month Forward P/E



Source: FactSet, Goldman Sachs Global Investment Research, December 2022

With the ECB, the Fed, the BoE and other central banks unlikely to pivot from to easing anytime soon (in order to avoid a repeat of the 1970s), we think hikes will extend beyond expectations and valuations will become even more challenged. Figure 12 suggests forward P/E multiples for both the US and the World have contracted back to the prepandemic range, but we expect more pressure on valuations in the mid-term (6 to 9 months). **We maintain our valuation factor at Neutral.**

Figure 12 | P/E multiples (U.S. and World) have come down but rising bond yields may pressure valuations further



Source: IBES, MSCI, Robeco November 2022

Technical indicators take a back seat to rate hike outlooks and risk

Historically when the Fed stops hiking, the S&P 500 gains 14% on average the next 12 months. We are waiting to see more economic forecasts anticipate that rates are peaking. Currently only 1/3 of forecasts are expecting easing rates by the end of 2023. If this pivots from 1/3 to 2/3, then we believe it would be a stronger signal than any technical indicator. Most officials are expecting the Fed rate to peak between 5 and 5.5% next year with the median projection implying a further 75 bps of rate hikes which compares less favorably to September's forecast when most anticipated the rate would reach 4.6% by the end of next year.

At the start of this quarter, we would have done well to believe the technical AAII Bull-Bear signal which was at an all-time low heading into Q3. It suggested excessive bearishness which tends to be a contrarian signal and – as it turns out, the market rallied in the quarter-to-date 5.7%. Today this risk appetite indicator is more neutral with a slight bias towards risk-off. We also suggested the possibility that some major institutions, banking systems or even countries are under rising stress due to rising global rates. It is still possible that something further will blow up – for example, an overleveraged hedge fund or over indebted country, or some other "surprise". In Q4 2022, FTX Trading Ltd., a cryptocurrency exchange, did in fact blow up but without any systemic impact beyond the crypto space so far. Rapidly rising rates may precipitate additional stress. This argues in favor of staying in the highest quality assets for the medium term.

Technical signals are mixed and not currently suggesting a bottom for equities is near. We believe that sentiment, rate hikes (Macro), earnings, and valuation all matter more today than traditional technical signals. We are continuing to monitor our technical signals for signs of significant changes in trends as we head into 2023, but until we see some capitulation in earnings or clarity on terminal Fed rates, we are less focused on technical factors.

We downgraded our technical factor from positive to neutral mid-year and we will hold it at that level.

Implications for positioning (Global Equity Portfolios): Emphasis on high quality companies selling at discounted valuations

We are actively searching for high quality opportunities in the U.S. and increasingly in Europe and Japan. We are now slightly overweight in Europe and raised weight in Japan to neutral. The overweight in Europe is based on more favorable value companies in the region (see again Figure 11). We continue to position the portfolio in highly profitable companies with pricing power and strong cashflows that can perform well in a period of higher-than-average inflation, and we are positioning our portfolios to reflect that high inflation could last some time. We believe companies offering premium products in their segments will outperform across all sectors.

Add to consumer-oriented companies while avoiding or reducing companies with continued supply chain challenges across sectors

During the quarter we continued to add weight to leading companies that will outperform as the global consumer environment deteriorates. For example, we added weight to a high-quality multinational consumer healthcare product company and initiated a new position in one of the world's largest athletic apparel companies that was beaten down during 2022 due to supply chain issues that have



been mitigated. We reduced or sold any company that has been unable to navigate the supply chain issues that have been apparent during 2022. We believe that companies should have built-in contingency planning for energy shortages or stable sourcing of other inputs to ease their supply chain issues at this point. We remain focused on owning companies that have a strong track record and ability to raise prices without losing market share. Highguality brands matter in an inflationary environment. Highquality stocks and defensive sectors have provided protection during previous bear markets, and we would expect more of the same if earnings growth takes the hit we anticipate. While the valuations of these groups are roughly in line with long-term averages, we would expect them to achieve clear premiums, as they have in previous periods of slowing earnings. We also constructed a barbelllike portfolio where we can quickly shift gears if necessary – and we have taken some action already to add more cyclical exposure.

Tactical profit-taking in healthcare sector to add weight to high quality global Technology companies

In 2022 the healthcare sector (+4%) has been a strong alpha generator in our Portfolio relative to MSCI World (-8.8%). While we remain overweight in the healthcare sector (see Spotlight on favored healthcare sector in our Q3 outlook), but we have reduced the weight during the quarter modestly for profit-taking. The profits harvested from the healthcare sector were generally redirected to the technology sector. We see a tactical opportunity in the sector while we do acknowledge growth stocks overall remain expensive in a longer-term context (Figure 13). We purchased a couple of high-quality semiconductor stocks at attractive entry points taking us overweight the semiconductor industry. Within technology we are also overweight IT services and software. We also added to two Japanese defensive technology companies during the quarter (i) a high quality pure-play automation company and (ii) a differentiated data communications company with a strong return profile and exposed to defensive endmarkets.

Figure 13 | S&P 500 Technology Relative



Source: IBES, J.P. Morgan December 2022

Aside from our technology weight (27.5%), other sectors with large portfolio weights are: health care (17.6%),

financials (12.6%), and consumer discretionary (10.6%) while we have least weight in Utilities (0%), Real Estate (1.7%) and Materials (3.7%). We continue to seek highquality, profitable companies in both cyclical and defensive sectors that have strong or improving sustainability profiles, impressive long-term track records of return on invested capital and attractive valuations as measured by high free cash flow.



Emerging Market Equities | Peak in US dollar and US Fed funds rate point to pivot in EM

- EM in our view look appealing, as Chinese tailwinds lead us to upgrade the macroeconomic outlook
- China is at a different stage of the cycle given its benign inflation and its change from zero-Covid policy
- Economic resilience combined with high rates could still be a catalyst for "value" asset classes such as EM equities

Five-factor summary

Factors	Score	Changes since last quarter
Macro	+	↑
Earnings	=	No change
Valuation	+	No change
Technicals	-	No change
Sentiment	=	No change
Overall	+	↑

Source: Robeco Emerging Markets Team

Let's go for the pivot

Although winter is only just here, both in the northern hemisphere and in the financial markets, the worst might be behind us for EM equities as an asset class. We have upgraded our macro factor. Although some EM economies are still going to see slowdowns in their real economies, tailwinds are apparent. One of the most important events in the first half of 2023 might be the end of the Fed's monetary tightening cycle. This could mean that we have seen the peak in the US dollar already, after the strong run it had in 2022 against all major currencies in the world.

Another tailwind comes from China, where the zero Covid era seems to be over, and more and more cities and regions are opening up as they relax testing and quarantine procedures. Re-opening in China leads us to expect higher GDP growth numbers in 2023. The stimulatory measures taken in the Chinese property sector further strengthens our more constructive position, and with inflation currently running at a low level (just 1.6% in November) the largest and most important emerging nation has a relatively benign macroeconomic backdrop. It also has abundant foreign exchange reserves and is running a large current account surplus.

In Latin America we foresee an end to monetary tightening by some central banks, with Brazil the most important. Brazil started hiking rates very early in the cycle, beginning over a year and a half ago. Since March 2021 the Selic rate in Brazil has steadily increased from 2% to its current level of 13.75% after the latest hike in August 2022. Commodity exporting countries like Brazil and Indonesia will also benefit from still high dollar denominated commodity prices, helping cushion any secondary inflation effects from higher import prices.

Some other EM countries, however, are still struggling to get inflation under control and have only just started to hike interest rates. For instance, India and South Africa could slow down substantially in the coming quarters. Meanwhile, emerging countries in central Europe are currently dealing with the twin issues of high inflation and the macro- and micro-economic disruptions resulting from Russia's invasion of Ukraine.

The earnings backdrop is mixed. Earnings revisions have weakened recently, with earnings revision ratios for both developed and emerging markets falling below 1. We still have a neutral view on emerging markets' earnings growth prospects relative to developed markets.

As the table above shows, our valuation factor is positive, and it became even more compelling in Q4. Emerging equities' derating has led to the price/earnings (P/E) ratio of the MSCI EM Index falling to close to 11x 2022 expected EPS. By contrast, the MSCI World's P/E ratio is over 15x.

Meanwhile, the technical picture for emerging markets is similar to developed markets. Our sentiment factor remains neutral as there have been unprecedented inflows into emerging equities of around USD 100 billion since October 2020. During 2022 we have seen the inflows decelerating significantly and net-net only USD 2 billion has been added to EM equity funds so far this year. Investors are increasingly looking for "value" opportunities. So, we expect continued inflows, but at a slower pace.

In conclusion, high but falling inflation, and an expected peak in global monetary tightening are likely to enhance the prospects for emerging market assets. Structurally strong commodity demand will create some winners, while depressed valuations will give rise to value opportunities over the longer term. For the coming quarter, we upgraded our five factor scores model and move to an overweight stance in emerging markets.

"Accidental" conflict

Recently I had a pleasant reunion with Stephen Roach, one of my inspirations in the investment profession. Stephen Roach is a former president of Morgan Stanley Asia and currently affiliated with Yale University. With him, I was able to get acquainted with the dynamics of the Chinese economy and its financial markets in China more than two decades ago. Initially, Roach was a big optimist on China, driven by a consistent growth strategy from China's leaders and its emergence as 'the factory for the world'. This boom period was characterized by rising economic prosperity and profit increases. From the end of 2000 to the end of 2020, there was a serious bull market in China, with MSCI China rising a bit over 500% (in EUR).



Recently, I was at the launch of Roach's latest book, titled "Accidental Conflict." It is a book about the precarious relationship between China and the United States. As the title suggests his earlier positivity has faded away. China's heyday of extremely high growth is over and China as the great profiteer of globalization is no more, as it is now the drumbeat of deglobalization that we hear. It is true that Roach still foresees good news in the short to medium term, partly due to the reopening after the pivot from the zero-Covid policy. Moreover, the real estate sector is being supported, and there is room for lower interest rates due to low inflation.

However, in the long term, Roach sees various headwinds for China, such as deglobalization and demographic constraints. China is likely to grow old before it gets rich. The government's restriction on the growth and profitability of the internet sector is here to stay, according to Roach. And under Xi's motto of "common prosperity," a significant proportion of corporate profits will be skimmed off. The political uncertainty has only increased with the appointment of Xi Jinping for at least one more term. The tension with Taiwan is probably not temporary, but structural in nature. All in all, enough reasons to be cautious towards Chinese equities in the longer term.

Since the end of 2020, MSCI China has plummeted about 30%. Thus, much of the bad news is already incorporated in the prices, but the question is whether there is more to come.

EM monetary easing will precede DM

Central banks in almost all emerging countries are still tightening, though in Latin America they should be close to the end of the cycle. To use Brazil as an example, Figure 14 illustrates the high real rates in Brazil. The convincing drop in Brazilian average price levels has not yet resulted in a decline in interest rates. For 2023, there is ample room to cut the policy rates in Brazil. China has been easing monetary policy already by cutting rates and reducing the required reserve ratio. It has more room to engage in further monetary stimulus, and with inflation not currently a problem in the country – the latest reading came in at a very benign 1.6% – we expect further monetary easing in early 2023.

Figure 14 | Inflation and interest rates in Brazil



Source: Bloomberg, Robeco

Commodity exporters well placed

During 2022 we have been adding to our positions in Latin American and southeast Asia as these markets' commodity exposure means they tend to act as better inflation hedges than large markets such as South Africa and India. Another argument in support of these portfolio positions is that some Latin American and Asian companies can maintain operating margins in their respective sectors since they are more vertically integrated than companies elsewhere, and thus don't suffer that much from the rise in most commodity prices.

This is not taper tantrum 2013 revisited

Back in 2013, when the US last set out on a severe tightening cycle, some emerging countries were labelled as fragile. Most economists agreed that Brazil, South Africa, Turkey, India and Indonesia fell into this category as they had large deficits on both the fiscal balance and the current account. This time around, however, fundamentals have changed for the better in most of these countries, with the exception of Turkey. Indonesia, for example, had a current account deficit of close to 5% of GDP in 2013, but now it is running a current account surplus. This provides considerable fundamental support for the rupiah.

As a group, emerging countries have a substantial current account surplus, whereas developed countries run a combined current account deficit, as Figure 15 shows. This is the main reason why we do expect a better environment for emerging market currencies as the Fed will likely pause during the first half of next year. The currencies of the countries' with the strongest trade accounts and large forex reserves might appreciate the most versus the US dollar.





Figure 15 | Current account estimates

Figure 17 | Emerging market earnings revisions



Figure 18 | MSCI World earnings revisions



Valuations positive for EM equities

Valuations remain positive for emerging equities, in our view. After their 12-month forward P/E ratio approached a ten-year low of 10x in early 2020 it rebounded sharply but has since fallen back again, as Figure 19 shows.

Figure 19 | Emerging equity valuations look attractive



Source: MSCI, Robeco, December 2022

At the time of writing the P/E ratio of emerging equities is close to 11x - well below the 15.5x of MSCI World. This is equivalent to a circa 30% valuation discount – a significantly larger discount compared to its historical average discount of close to 15%. Emerging equities are also trading at a 30% discount to developed markets from a



Earnings expectations are slowing down in both developed and emerging markets

The one-month earnings revision ratio for emerging markets stabilized around 0.65 in December, as we can see in Figure 16. It remains below its long-term average, which is a negative sign for emerging market corporate earnings. The earnings picture for emerging markets is similar to that of developed markets.

Figure 16 | Emerging market earnings revisions ratio



Source: Bank of America, December 2022

After earnings in emerging markets rose by around 50% in 2021, expected earnings growth is likely to fall to around 8% this year. For 2023, IBES consensus earnings growth hovers around 3% for both the group of emerging countries and the group of developed countries. Overall, we view earnings as neutral for EM equities.



price-to-book perspective. The emerging markets' P/E- and P/B ratios relative to developed markets are currently at 15-year lows.

Technical picture still negative

Year-to-date, emerging equities underperformed developed equities, as MSCI EM declined 12.5% and MSCI World was down 7.5%. On a twelve-month basis emerging markets underperformed developed markets as well. The share price momentum remains quite dire in almost all global equity markets. As a result, our assessment of the technical picture for emerging markets is still negative.



Figure 20 Relative performance of MSCI EM and MSCI DM

Sentiment still neutral

Our assessment of sentiment towards emerging equities is still neutral. We expect inflows to continue as investors look for attractively valued asset classes providing high yields. However, inflows have slowed down from the second quarter of 2022, since which there have been USD 2 billion net inflows into emerging equity funds after more than USD 100 billion inflows in 2021, as Figure 20 shows. We expect the current slower pace of inflows to persist early 2023 as monetary tightening in the developed world reaches its conclusion. Figure 21 Cumulative flows into emerging equities by year



Jan Feb Mar Apr May Jun Jul Aug Sep Oct Nov Dec Source: EPFR Global, December 2022

Implications for portfolio positioning (EM portfolios)

We remain overweight in some of the most important commodity-rich nations such as Brazil and Indonesia, on the back of still high prices of most commodities on the global market. The portfolios continue to be overweight in north Asia as well, based on the region's relatively strong macroeconomic fundamentals. In the current era of tapering, investor focus is likely to shift towards potential macroeconomic vulnerabilities, such as current account deficits. The largest current account surpluses are to be found in the north Asian countries of China and Taiwan, so these countries' currencies are likely to be resilient. We are maintaining the value tilt in our emerging market equity portfolios, which have a lower average P/E ratio than the MSCI Emerging Markets Index.

The portfolios will remain overweight in South Korea, Brazil, Indonesia, Vietnam, Greece and Hungary as we believe their economies have a strong chance of rebounding, and because corporate earnings growth potential is high going into 2023. Current valuations do not reflect these relatively strong fundamentals.

At the sector level, we are overweight in consumer discretionary and information technology and remain underweight in the expensive consumer staples sector. We are also overweight in financials.

Focus on China

We are turning more constructive on the China market as multiple positive developments, such as easing of covid control, supportive property measures, and geopolitical risk de-escalation, all signal recovery and collectively reduce the risk premium for China.

China's covid situation finally reached an inflection point as policy changes marked the beginning of the end of 'Dynamic Zero Covid Control' at the end of November. Several new measures further reinforced and accelerated China's reopening, sending a clear message to local governments. China will push for a more aggressive program for the elderly to increase their vaccination rate. Although there could be a bumpy road ahead as infection cases will rise for the next few months and potentially

Source: MSCI, Robeco, December 2022



pressure the healthcare system, the path is set towards the reopening.

The "16 measures" announced in November continued support for the property sector. The regulators instructed commercial banks to extend more credit to the property sector in general, and help developers complete existing projects. Since then, the "16 measures" have led to a slew of policy actions, such as the RRR cut. The signaling effect from the RRR cut is more important than the direct impact, as policymakers affirmed an easing bias to the market.

After the recent pivotal changes to both property and Covid-19 policies, the Politburo meeting in December delivered a strong signal shifting the focus to economic growth. China will pursue an expansionary fiscal policy and an accommodative monetary policy. In addition, more industrial policies, technological policies and social policies are likely to be rolled out. Stimulatory efforts could be made to expand domestic demand, via both consumption and investment.

Near-term growth may still face pressure amid declining export growth, as well as relaxed Covid measures leading to a surge in infections. A more supportive fiscal stance can help hedge the uncertainty brought on by the reopening process, supporting further normalization of domestic consumption. The pro-growth tilt of policies will be supportive for a growth recovery in 2023.

Geopolitical risks eased as President Xi Jinping met world leaders including President Biden during the G20 summit. At the same time, we see the ADR auditing progress as a positive sign moving forward. Long term, US-China tension is unlikely to subside, but the near-term de-escalation, along with the policy change in Covid control and supportive measures for the property sector, significantly reduced the tail risk for the China market and have lifted market sentiment.

Earnings revisions will be on a recovery path but could still take some time to stabilize, as economic activities may continue to be subdued in the next 2-3 months despite the Covid policy easing. Even with potentially faster easing of Covid restrictions, we expect economic activity to only recover slowly. People may remain cautious about going out and joining in offline services activities amid rising Covid cases and lingering fear about the virus. In addition, a wider spread of Covid may lead to some disruptions in supply and logistics. Valuations have rebounded since the November rally, but remain attractive from an historical average point of view.

Important Information

Robecco Institutional Asset Management B.V. has a license as manager of Undertakings for Collective Investment in Transferable Securities (UCITS) and Alternative Investment Funds (AIFs) ("Fund(s)") from the Netherlands Authority for the Financial Markets in Amsterdam. This marketing document is intended solely for professional investors, defined as investors qualifying as professional clients, who have requested to be treated as professional clients or are authorized to receive such information under any applicable laws. Robeco Institutional Asset Management B.V. and/or its related, affiliated and subsidiary companies, ("Robeco"), will not be liable for any damages arising out of the use of this document. Users of this information who provide investment services in the European Union have their own responsibility to assess whether they are allowed to receive the information in accordance with MiFID II regulations. To the extent this information qualifies as a reasonable and appropriate minor non-monetary benefit under MiFID II, users that provide investment services in the European Union are responsible for complying with applicable recordkeeping and disclosure requirements. The content of this document is based upon sources of information believed to be reliable and comes without warranties of any kind. Without further explanation this document cannot be considered complete. Any opinions, estimates or forecasts may be changed at any time without prior warning. If in doubt, please seek independent advice. This document is intended to provide the professional investor with general information about Robeco's specific capabilities but has not been prepared by Robeco as investment research and does not constitute an investment recommendation or advice to buy or sell certain securities or investment products or to adopt any investment strategy or legal, accounting or tax advice. All rights relating to the information in this document are and will remain the property of Robeco. This material may not be copied or shared with the public. No part of this document may be reproduced or published in any form or by any means without Robeco's prior written permission. Investment involves risks. Before investing, please note the initial capital is not guaranteed. Investors should ensure they fully understand the risk associated with any Robeco product or service offered in their country of domicile. Investors should also consider their own investment objective and risk tolerance level. Historical returns are provided for illustrative purposes only. The price of units may go down as well as up and past performance is no guarantee of future results. If the currency in which the past performance is displayed differs from the currency of the country in which you reside, then you should be aware that due to exchange rate fluctuations the performance shown may increase or decrease if converted into your local currency. The performance data do not take account of the commissions and costs incurred when trading securities in client portfolios or for the issue and redemption of units. Unless otherwise stated, the prices used for the performance figures of the Luxembourg-based Funds are the end-of-month transaction prices net of fees up to 4 August 2010. From 4 August 2010, the transaction prices net of fees will be those of the first business day of the month. Return figures versus the benchmark show the investment management result before management and/or performance fees; the Fund returns are with dividends reinvested and based on net asset values with prices and exchange rates as at the valuation moment of the benchmark. Please refer to the prospectus of the Funds for further details. Performance is quoted net of investment management fees. The ongoing charges mentioned in this document are the ones stated in the Fund's latest annual report at closing date of the last calendar year. This document is not directed to or intended for distribution to or for use by any person or entity who is a citizen or resident of or located in any locality, state, country or other jurisdiction where such distribution, document, availability or use would be contrary to law or regulation or which would subject any Fund or Robeco Institutional Asset Management B.V. to any registration or licensing requirement within such jurisdiction. Any decision to subscribe for interests in a Fund offered in a particular jurisdiction must be made solely on the basis of information contained in the prospectus, which information may be different from the information contained in this document. Prospective applicants for shares should inform themselves as to legal requirements which may also apply and any applicable exchange control regulations and taxes in the countries of their respective citizenship, residence or domicile. The Fund information, if any, contained in this document is qualified in its entirety by reference to the prospectus, and this document should, at all times, be read in conjunction with the prospectus. Detailed information on the Fund and associated risks is contained in the prospectus. The prospectus and the Key Investor Information Document for the Robeco Funds can all be obtained free of charge from Robeco's websites.

Additional Information for US investors

Robeco is considered "participating affiliated" and some of their employees are "associated persons" of Robeco Institutional Asset Management US Inc. ("RIAM US") as per relevant SEC no-action guidance. Employees identified as associated persons of RIAM US perform activities directly or indirectly related to the investment advisory services provided by RIAM US. In those situations these individuals are deemed to be acting on behalf of RIAM US, a US SEC registered investment adviser. SEC regulations are applicable only to clients, prospects and investors of RIAM US. RIAM US is a wholly owned subsidiary of ORIX Corporation Europe N.V. and offers investment advisory services to institutional clients in the US.

Additional Information for investors with residence or seat in Australia and New Zealand This document is distributed in Australia by Robeco Hong Kong Limited (ARBN 156 512 659) ("RIAM BV"), which is exempt from the requirement to hold an Australian financial services license under the Corporations Act 2001 (Cth) pursuant to ASIC Class Order 03/1103. Robeco is regulated by the Securities and Futures Commission under the laws of Hong Kong and those laws may differ from Australian laws. This document is distributed only to "wholesale clients" as that term is defined under the Corporations Act 2001 (Cth). This document is not intended for distribution or dissemination, directly or indirectly, to any other class of persons. In New Zealand, this document is only available to wholesale investors within the meaning of clause 3(2) of Schedule 1 of the Financial Market's Conduct Act 2013 (FMCA). This document is not intended for public distribution in Australia and New Zealand.

Additional Information for investors with residence or seat in Austria

This information is solely intended for professional investors or eligible counterparties in the meaning of the Austrian Securities Oversight Act. Additional Information for investors with residence or seat in Brazil The Fund may not be offered or sold to the public in Brazil. Accordingly, the Fund has not been nor will be registered with the Brazilian Securities Commission (CVM), nor has it been submitted to the foregoing agency for approval. Documents relating to the Fund, as well as the information contained therein, may not be supplied to the public in Brazil, as the offering of the Fund is not a public offering of securities in Brazil, nor may they be used in connection with any offer for subscription or sale of securities to the public in Brazil.

Additional Information for investors with residence or seat in Brunei The Prospectus relates to a private collective investment scheme which is not subject to any form of domestic regulations by the Autoriti Monetari Brunei Darussalam ("Authority"). The Prospectus is intended for distribution only to specific classes of investors as specified in section 20 of the Securities Market Order, 2013, and must not, therefore, be delivered to, or relied on by, a retail client. The Authority is not responsible for reviewing or verifying any prospectus or other documents in connection with this collective investment scheme. The Authority has not approved the Prospectus or any other associated documents nor taken any steps to verify the information set out in the Prospectus and has no responsibility for it. The units to which the Prospectus relates may be illiquid or subject to restrictions on their resale. Prospective purchasers of the units offered should conduct their own due diligence on the units.

Additional Information for investors with residence or seat in Canada

No securities commission or similar authority in Canada has reviewed or in any way passed upon this document or the merits of the securities described herein, and any representation to the contrary is an offence. Robeco Institutional Asset Management B.V. relies on the international dealer and international adviser exemption in Quebec and has appointed McCarthy Tétrault LLP as its agent for service in Quebec

Additional information for investors with residence or seat in the Republic of Chile

Neither Robeco nor the Funds have been registered with the Comisión para el Mercado Financiero pursuant to Law no. 18.045, the Ley de Mercado de Valores and regulations thereunder. This document does not constitute an offer of or an invitation to subscribe for or purchase shares of the Funds in the Republic of Chile, other than to the specific person who individually requested this information on their own initiative. This may therefore be treated as a "private offering" within the meaning of article 4 of the Ley de Mercado de Valores (an offer that is not addressed to the public at large or to a certain sector or specific group of the public).

Additional Information for investors with residence or seat in Colombia

This document does not constitute a public offer in the Republic of Colombia. The offer of the Fund is addressed to fewer than one hundred specifically identified investors. The Fund may not be promoted or marketed in Colombia or to Colombian residents, unless such promotion and marketing is made in compliance with Decree 2555 of 2010 and other applicable rules and regulations , related to the promotion of foreign Funds in Colombia.

Additional Information for investors with residence or seat in the Dubai International Financial Centre (DIFC), United Arab Emirates

This material is distributed by Robeco Institutional Asset Management B.V. (DIFC Branch) located at Office 209, Level 2, Gate Village Building 7, Dubai International Financial Centre, Dubai, PO Box 482060, UAE. Robeco Institutional Asset Management B.V. (DIFC Branch) is regulated by the Dubai Financial Services Authority ("DFSA") and only deals with Professional Clients or Market Counterparties and does not deal with Retail Clients as defined by the DFSA

Additional Information for investors with residence or seat in France

Robeco Institutional Asset Management B.V. is at liberty to provide services in France. Robeco France is a subsidiary of Robeco whose business is based on the promotion and distribution of the group's funds to professional investors in France.

Additional Information for investors with residence or seat in Germany

This information is solely intended for professional investors or eligible counterparties in the meaning of the German Securities Trading Act. Additional Information for investors with residence or seat in Hong Kong The contents of this document have not been reviewed by the Securities and Futures Commission ("SFC") in Hong Kong. If there is in any doubt about any of the contents of this document, independent professional advice should be obtained. This document has been distributed by Robeco Hong Kong Limited ("Robeco"). Robeco is regulated by the SFC in Hong Kong.

Additional Information for investors with residence or seat in Indonesia The Prospectus does not constitute an offer to sell nor a solicitation to buy securities in Indonesia.

Additional Information for investors with residence or seat in Italy

This document is considered for use solely by qualified investors and private professional clients (as defined in Article 26 (1) (b) and (d) of Consob Regulation No. 16190 dated 29 October 2007). If made available to Distributors and individuals authorized by Distributors to conduct promotion and marketing activity, it may only be used for the purpose for which it was conceived. The data and information contained in this document may not be used for communications with Supervisory Authorities. This document does not include any information to determine, in concrete terms, the investment inclination and, therefore, this document cannot and should not be the basis for making any investment decisions.

Additional Information for investors with residence or seat in Japan

No. the Director of Kanto Local Financial Bureau (Financial Instruments Business Operator), No, 2780, Member of Japan Investment Advisors Association].

Additional Information for investors with residence or seat in South Korea

The Management Company is not making any representation with respect to the eligibility of any recipients of the Prospectus to acquire the Shares therein under the laws of South Korea, including but not limited to the Foreign Exchange Transaction Act and Regulations thereunder. The Shares have not been registered under the Financial Investment Services and Capital Markets Act of Korea, and none of the Shares may be offered, sold or delivered, or offered or sold to any person for re-offering or resale, directly or indirectly, in South Korea or to any resident of South Korea except pursuant to applicable laws and regulations of South Korea.

Additional Information for investors with residence or seat in Liechtenstein

This document is exclusively distributed to Liechtenstein-based, duly licensed financial intermediaries (such as banks, discretionary portfolio managers, insurance companies, fund of funds) which do not intend to invest on their own account into Fund(s) displayed in the document. This material is distributed by Robeco Switzerland Ltd, postal address: Josefstrasse 218, 8005 Zurich, Switzerland.

LGT Bank Ltd., Herrengasse 12, FL-9490 Vaduz, Liechtenstein acts as the representative and paying agent in Liechtenstein. The prospectus, the Key Investor Information Documents (KIIDs), the articles of association, the annual and semi-annual reports of the Fund(s) may be obtained from the representative or via the website. Additional Information for investors with residence or seat in Malaysia

Generally, no offer or sale of the Shares is permitted in Malaysia unless where a Recognition Exemption or the Prospectus Exemption applies: NO ACTION HAS BEEN, OR WILL BE, TAKEN TO COMPLY WITH MALAYSIAN LAWS FOR MAKING AVAILABLE, OFFERING FOR SUBSCRIPTION OR PURCHASE, OR ISSUING ANY INVITATION TO SUBSCRIBE FOR OR PURCHASE OR SALE OF THE SHARES IN MALAYSIA OR TO PERSONS IN MALAYSIA AS THE SHARES ARE NOT INTENDED BY THE ISSUER TO BE MADE AVAILABLE, OR MADE THE SUBJECT OF ANY OFFER OR INVITATION TO SUBSCRIBE OR PURCHASE, IN MALAYSIA. NEITHER THIS DOCUMENT NOR ANY DOCUMENT OR OTHER MATERIAL IN CONNECTION WITH THE SHARES SHOULD BE DISTRIBUTED, CAUSED TO BE DISTRIBUTED OR CIRCULATED IN MALAYSIA. NO PERSON SHOULD MAKE AVAILABLE OR MAKE ANY INVITATION OR OFFER OR INVITATION TO SELL OR PURCHASE THE SHARES IN MALAYSIA UNLESS SUCH PERSON TAKES THE NECESSARY ACTION TO COMPLY WITH MALAYSIAN LAWS

Additional Information for investors with residence or seat in Mexico

The funds have not been and will not be registered with the National Registry of Securities, maintained by the Mexican National Banking and Securities Commission and, as a result, may not be offered or sold publicly in Mexico. Robeco and any underwriter or purchaser may offer and sell the funds in Mexico on a private placement basis to Institutional and Accredited Investors, pursuant to Article 8 of the Mexican Securities Market Law.

Additional Information for investors with residence or seat in Peru

The Fund has not been registered with the Superintendencia del Mercado de Valores (SMV) and is being placed by means of a private offer. SMV has not reviewed the information provided to the investor. This document is only for the exclusive use of institutional investors in Peru and is not for public distribution.

Additional Information for investors with residence or seat in Singapore This document has not been registered with the Monetary Authority of Singapore ("MAS"). Accordingly, this document may not be circulated or distributed directly or indirectly to persons in Singapore other than (i) to an institutional investor under Section 304 of the SFA, (ii) to a relevant person pursuant to Section 305(1), or any person pursuant to Section 305(2), and in accordance with the conditions specified in Section 305, of the SFA, or (iii) otherwise pursuant to, and in accordance with the conditions of, any other applicable provision of the SFA. The contents of this document have not been reviewed by the MAS. Any decision to participate in the Fund should be made only after reviewing the sections regarding investment considerations, conflicts of interest, risk factors and the relevant Singapore selling restrictions (as described in the section entitled "Important Information for Singapore Investors") contained in the prospectus. Investors should consult your professional adviser if you are in doubt about the stringent restrictions applicable to the use of this document, regulatory status of the Fund, applicable regulatory protection, associated risks and suitability of the Fund to your objectives. Investors should note that only the Sub-Funds listed in the appendix to the section entitled "Important Information for Singapore Investors" of the prospectus ("Sub-Funds") are available to Singapore investors. The Sub-Funds are notified as restricted foreign schemes under the Securities and Futures Act, Chapter 289 of Singapore ("SFA") and invoke the exemptions from compliance with prospectus registration requirements pursuant to the exemptions under Section 304 and Section 305 of the SFA. The Sub-Funds are not authorized or recognized by the MAS and shares in the Sub-Funds are not allowed to be offered to the retail public in Singapore. The prospectus of the Fund is not a prospectus as defined in the SFA. Accordingly, statutory liability under the SFA in relation to the content of prospectuses does not apply. The Sub-Funds may only be promoted exclusively to persons who are sufficiently experienced and sophisticated to understand the risks involved in investing in such schemes, and who satisfy certain other criteria provided under Section 304, Section 305 or any other applicable provision of the SFA and the subsidiary legislation enacted thereunder. You should consider carefully whether the investment is suitable for you. Robeco Singapore Private Limited holds a capital markets services license for fund management issued by the MAS and is subject to certain clientele restrictions under such license

Additional Information for investors with residence or seat in Spain

Robeco Institutional Asset Management B.V., Sucursal en España with identification number W0032687F and having its registered office in Madrid at Calle Serrano 47-149, is registered with the Spanish Commercial Registry in Madrid, in volume 19.957, page 190, section 8, sheet M-351927 and with the National Securities Market Commission (CNMV) in the Official Register of branches of European investment services companies, under number 24. The investment funds or SICAV mentioned in this document are regulated by the corresponding authorities of their country of origin and are registered in the Special Registry of the CNMV of Foreign Collective Investment Institutions marketed in Spain.

Additional Information for investors with residence or seat in South Africa

Robeco Institutional Asset Management B.V. is registered and regulated by the Financial Sector Conduct Authority in South Africa.

Additional Information for investors with residence or seat in Switzerland

The Fund(s) are domiciled in Luxembourg. This document is exclusively distributed in Switzerland to qualified investors as defined in the Swiss Collective Investment Schemes Act (CISA). This material is distributed by Robeco Switzerland Ltd, postal address: Josefstrasse 218, 8005 Zurich. ACOLIN Fund Services AG, postal address: Affolternstrasse 56, 8050 Zürich, acts as the Swiss representative of the Fund(s). UBS Switzerland AG, Bahnhofstrasse 45, 8001 Zurich, postal address: Europastrasse 2, P.O. Box, CH-8152 Opfikon, acts as the Swiss paying agent. The prospectus, the Key Investor Information Documents (KIIDs), the articles of association, the annual and semi-annual reports of the Fund(s), as well as the list of the purchases and sales which the Fund(s) has undertaken during the financial year, may be obtained, on simple request and free of charge, at the office of the Swiss representative ACOLIN Fund Services AG. The prospectuses are also available via the website. Additional Information relating to RobecoSAM-branded funds/services

Robeco Switzerland Ltd, postal address Josefstrasse 218, 8005 Zurich, Switzerland has a license as asset manager of collective assets from the Swiss Financial Market Supervisory Authority FINMA.

RobecoSAM-branded financial instruments and investment strategies referring to such financial instruments are generally managed by Robeco Switzerland Ltd. The RobecoSAM brand is a registered trademark of Robeco Holding B.V. The brand RobecoSAM is used to market services and products which entail Robeco's expertise on Sustainable Investing (SI). The brand RobecoSAM is not to be considered as a separate legal entity.

Additional Information for investors with residence or seat in Taiwan

The contents of this document have not been reviewed by any regulatory authority in Hong Kong. If you are in any doubt about any of the contents of this document, you should obtain independent professional advice. This document has been distributed by Robeco hong Kong Limited ('Robeco'). Robeco is regulated by the Securities and Futures Commission in Hong Kong. Additional Information for investors with residence or seat in Thailand

The Prospectus has not been approved by the Securities and Exchange Commission which takes no responsibility for its contents. No offer to the public to purchase the Shares will be made in Thailand and the Prospectus is intended to be read by the addressee only and must not be passed to, issued to, or shown to the public generally. Additional Information for investors with residence or seat in the United Arab Emirates

Some Funds referred to in this marketing material have been registered with the UAE Securities and Commodities Authority (the Authority). Details of all Registered Funds can be found on the Authority's website. The Authority assumes no liability for the accuracy of the information set out in this material/document, nor for the failure of any persons engaged in the investment Fund in performing their duties and responsibilities.

Additional Information for investors with residence or seat in the United Kingdom

Robeco is temporarily deemed authorized and regulated by the Financial Conduct Authority. Details of the Temporary Permissions Regime, which allows EEA-based firms to operate in the UK for a limited period while seeking full authorization, are available on the Financial Conduct Authority's website.

Additional Information for investors with residence or seat in Uruguay

The sale of the Fund qualifies as a private placement pursuant to section 2 of Uruguayan law 18,627. The Fund must not be offered or sold to the public in Uruguay, except under circumstances which do not constitute a public offering or distribution under Uruguayan laws and regulations. The Fund is not and will not be registered with the Financial Services Superintendency of the Central Bank of Uruguay. The Fund corresponds to investment funds that are not investment funds regulated by Uruguayan law 16,774 dated September 27, 1996, as amended.

© Q4/2022 Robeco